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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
KAWAI HIROYUKI ET AL : ATTN: APPLICATION DIVISION
SERIAL NO: 09/926,068 :
FILED: AUGUST 23, 2001 :
FOR: METHOD OF TRANSMITTING :
BURST SIGNAL IN MOBILE
COMMUNICATION SYSTEM
AND DEVICE THEREFOR,
INFORMATION DISTRIBUTING
METHOD AND INFORMATION
DISTRIBUTION CONTROL
DEVICE

PRELIMINARY AMENDMENT

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

SIR:

Prior to a first examination on the merits, please amend the above-identified application.

IN THE CLAIMS

Please amend the claims as follows:

3. (Amended) The method of transmitting a burst signal as claimed in claim 1,
wherein:

the determination as to whether or not the burst signal is to be transmitted is
performed further depending on the transmission waiting state of the burst signal.

5. (Amended) The method of transmitting a burst signal as claimed in claim 1, wherein:

the determination as to whether or not the burst signal is to be transmitted is performed further depending on performance required for transmitting the burst signal.

7. (Amended) The method of transmitting a burst signal as claimed in claim 5, wherein:

at least one of the transmission power value and transmission rate of the burst signal to be transmitted is determined further depending on the performance required for transmitting the burst signal.

8. (Amended) The method of transmitting a burst signal as claimed in claim 1, wherein:

said criterion is expressed as a reference transmission power value and/or reference transmission rate, and, it is determined as to whether or not the burst signal is to be transmitted based on the comparison result between the reference transmission power value and/or reference transmission rate and transmission power value and/or transmission rate determined in accordance with the state of the radio channel.

9. (Amended) The method of transmitting a burst signal as claimed in claim 1, wherein the state of the radio channel comprises not only the state of the radio channel between the transmitting station and receiving station to which the burst signal is addressed but also the state of a radio channel with another receiving station.

14. (Amended) The transmitting device in a mobile communication system as claimed in claim 12, wherein:

a determination result by said transmission permission criterion determining means further depends on a transmission waiting state of the burst signal.

16. (Amended) The transmitting device in a mobile communication system as claimed in claim 12, wherein:

a determination result by said determining means further depends on performance required for transmitting the burst signal.

18. (Amended) The transmitting device in a mobile communication system as claimed in claim 16, comprising:

transmission power determining means determines the transmission power value of the burst signal to be transmitted based on the performance required for transmitting the burst signal as well as the state of the radio channel.

19. (Amended) The transmitting device in a mobile communication system as claimed in claim 12, wherein:

said transmission permission criterion determining means determines a reference transmission power value as the transmission permission criterion; and

said determining means determines as to whether or not the burst signal is to be transmitted based on the comparison result between the reference transmission power value determined by said transmission permission criterion determining means and the transmission power value determined in accordance with the state of the radio channel.

20. (Amended) The transmitting device in a mobile communication system as claimed in claim 16, comprising a transmission rate determining means determining the transmission rate of the burst signal to be transmitted based on the performance required for transmitting the burst signal as well as the state of the radio channel.

21. (Amended) The transmitting device in a mobile communication system as claimed in claim 12, wherein:

said transmission permission criterion determining means determines a reference transmission rate; and

said determining means determines as to whether or not the burst signal is to be transmitted based on the comparison result between the reference transmission rate value determined by said transmission permission criterion determining means and the transmission rate value determined in accordance with the state of the radio channel.

22. (Amended) The transmitting device in a mobile communication system as claimed in claim 12, wherein:

said transmission permission criterion determining means determines a reference transmission power value and a reference transmission rate; and said determining means determines as to whether or not the burst signal is to be transmitted based on the comparison result between the reference transmitting power value and reference transmission rate value determined by said transmission permission criterion determining means and the transmission power value and transmission rate value determined in accordance with the state of the radio channel.

23. (Amended) The transmitting device in a mobile communication system as claimed in claim 12, wherein said determining means makes the determination in consideration of not only the state of the radio channel between the transmitting station and receiving station to which the burst signal is addressed but also the state of a radio channel with another receiving station.

28. (Amended) The method of distributing information in a mobile communication system as claimed in claim 26, wherein:

the one or plurality of base stations to perform communication with the mobile set are determined based on performance required for transmission of the information to be distribute to the mobile set.

29. (Amended) The method of distributing information in a mobile communication system as claimed in claim 26, wherein:

the one or plurality of base stations to perform communication with the mobile set are determined based on a transmission waiting state of information to be distributed in each base station.

30. (Amended) The method of distributing information in a mobile communication system as claimed in claim 26, wherein:

the information to be distributed to the mobile set is distributed to the thus-determined plurality of base stations without duplication.

31. (Amended) The method of distributing information in a mobile communication system as claimed in claim 26, wherein:

a part or all of the information to be distributed to the mobile set is copied, and the information to be distributed to the mobile set is distributed to the thus-determined plurality of base stations with duplication of the part or all of the information.

32. (Amended) The method of distributing information in a mobile communication system as claimed in claim 26, wherein:

a larger amount of the information is distributed to a base station of the thus-determined plurality of base stations which has a smaller amount of information in a transmission waiting state.

33. (Amended) The method of distributing information in a mobile communication system as claimed in claim 26, wherein:

a larger amount of the information is distributed to a base station of the thus-determined plurality of base stations which has a better state of the radio channel with the mobile set.

34. (Amended) The method of distributing information in a mobile communication system as claimed in claim 26, wherein

amounts of distributing of the information to the thus-determined plurality of base stations are determined based on an amount of information in a transmission waiting state and a state of the radio channel with the mobile set in each base station.

36. (Amended) The method of distributing information in a mobile communication system as claimed in claim 26, wherein:

when a state of information piled up in a transmission waiting state in each base station becomes a predetermined state, a part or all of the information in a transmission waiting state is collected; and

the thus-collected information is re-distributed to one or a plurality of base stations as information to be distributed.

40. (Amended) The information distributing control device as claimed in claim 38, wherein:

said base station determining means determines the one or plurality of base stations to perform communication with the mobile set based on performance required for transmission of the information to be distributed to the mobile set.

41. (Amended) The information distributing control device as claimed in claim 38, wherein:

said base station determining means determines the one or plurality of base stations to perform communication with the mobile set based on a transmission waiting state of the information to be distributed in each base station.

42. (Amended) The information distributing control device as claimed in claim 38, wherein:

said information distributing means distributes the information to be distributed to the mobile set to the thus-determined plurality of base stations without duplication.

43. (Amended) The information distributing control device as claimed in claim 38, wherein:

said information distributing means copies a part or all of the information to be distributed to the mobile set, and distributes the information to be distributed to the mobile set to the thus-determined plurality of base stations with duplication of the part or all of the information.

44. (Amended) The information distributing control device as claimed in claim 38 , wherein:

said information distributing means distributes a larger amount of the information to a base station of the thus-determined plurality of base stations which has a smaller amount of information in a transmission waiting state.

45. (Amended) The information distributing control device as claimed in claim 38, wherein:

said information distributing means distributes a larger amount of the information to a base station of the thus-determined plurality of base stations which has a better state of the radio channel with the mobile set.

46. (Amended) The information distributing control device as claimed in claim 38, wherein:

said information distributing means determines amounts of distributing of the information to the thus-determined plurality of base stations based on an amount of information in a transmission waiting state and a state of the radio channel with the mobile set in each base station.

48. (Amended) The information distributing control device as claimed in claim 38, further comprising information collecting means which, when a state of information piled up in a transmission waiting state in each base station becomes a predetermined state, collects a part or all of the information in the transmission waiting state,

said information distributing means redistributing the thus-collected information to one or a plurality of base stations as information to be distributed.

REMARKS

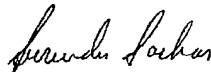
Favorable consideration of this application, as presently amended, is respectfully requested.

The present preliminary amendment is submitted to cancel the improper multiple dependencies in the original claims. No claim amendments are deemed to narrow the scope of the claims.

The present application is believed to be in condition for a full and thorough examination on the merits. An early and favorable consideration of the present application is hereby respectfully requested.

Respectfully submitted,

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IN THE CLAIMS

--3. (Amended) The method of transmitting a burst signal as claimed in claim 1 [or 2], wherein:

the determination as to whether or not the burst signal is to be transmitted is performed further depending on the transmission waiting state of the burst signal.

5. (Amended) The method of transmitting a burst signal as claimed in [any of claims] claim 1 [through 4], wherein:

the determination as to whether or not the burst signal is to be transmitted is performed further depending on performance required for transmitting the burst signal.

7. (Amended) The method of transmitting a burst signal as claimed in claim 5 [or 6], wherein:

at least one of the transmission power value and transmission rate of the burst signal to be transmitted is determined further depending on the performance required for transmitting the burst signal.

8. (Amended) The method of transmitting a burst signal as claimed in [any of claims] claim 1 [through 7], wherein:

said criterion is expressed as a reference transmission power value and/or reference transmission rate, and, it is determined as to whether or not the burst signal is to be

transmitted based on the comparison result between the reference transmission power value and/or reference transmission rate and transmission power value and/or transmission rate determined in accordance with the state of the radio channel.

9. (Amended) The method of transmitting a burst signal as claimed in [any of claims] claim 1 [through 8], wherein the state of the radio channel comprises not only the state of the radio channel between the transmitting station and receiving station to which the burst signal is addressed but also the state of a radio channel with another receiving station.

14. (Amended) The transmitting device in a mobile communication system as claimed in claim 12 [or 13], wherein:

a determination result by said transmission permission criterion determining means further depends on a transmission waiting state of the burst signal.

16. (Amended) The transmitting device in a mobile communication system as claimed in [any of claims] claim 12 [through 15], wherein:

a determination result by said determining means further depends on performance required for transmitting the burst signal.

18. (Amended) The transmitting device in a mobile communication system as claimed in claim 16 [or 17], comprising:

transmission power determining means determines the transmission power value of the burst signal to be transmitted based on the performance required for transmitting the burst signal as well as the state of the radio channel.

19. (Amended) The transmitting device in a mobile communication system as claimed in [any of claims] claim 12 [through 18], wherein:

said transmission permission criterion determining means determines a reference transmission power value as the transmission permission criterion; and

said determining means determines as to whether or not the burst signal is to be transmitted based on the comparison result between the reference transmission power value determined by said transmission permission criterion determining means and the transmission power value determined in accordance with the state of the radio channel.

20. (Amended) The transmitting device in a mobile communication system as claimed in claim 16 [or 17], comprising a transmission rate determining means determining the transmission rate of the burst signal to be transmitted based on the performance required for transmitting the burst signal as well as the state of the radio channel.

21. (Amended) The transmitting device in a mobile communication system as claimed in [any of claims] claim 12 [through 18], wherein:

said transmission permission criterion determining means determines a reference transmission rate; and

said determining means determines as to whether or not the burst signal is to be transmitted based on the comparison result between the reference transmission rate value determined by said transmission permission criterion determining means and the transmission rate value determined in accordance with the state of the radio channel.

22. (Amended) The transmitting device in a mobile communication system as claimed in [any of claims] claim 12 [through 18], wherein:

said transmission permission criterion determining means determines a reference transmission power value and a reference transmission rate; and said determining means determines as to whether or not the burst signal is to be transmitted based on the comparison

result between the reference transmitting power value and reference transmission rate value determined by said transmission permission criterion determining means and the transmission power value and transmission rate value determined in accordance with the state of the radio channel.

23. (Amended) The transmitting device in a mobile communication system as claimed in [any of claims] claim 12 [through 22], wherein said determining means makes the determination in consideration of not only the state of the radio channel between the transmitting station and receiving station to which the burst signal is addressed but also the state of a radio channel with another receiving station.

28. (Amended) The method of distributing information in a mobile communication system as claimed in claim 26 [or 27], wherein:

the one or plurality of base stations to perform communication with the mobile set are determined based on performance required for transmission of the information to be distribute to the mobile set.

29. (Amended) The method of distributing information in a mobile communication system as claimed in [any of claims] claim 26 [through 28], wherein:

the one or plurality of base stations to perform communication with the mobile set are determined based on a transmission waiting state of information to be distributed in each base station.

30. (Amended) The method of distributing information in a mobile communication system as claimed in [any of claims] claim 26 [through 29], wherein:

the information to be distributed to the mobile set is distributed to the thus-determined plurality of base stations without duplication.

31. (Amended) The method of distributing information in a mobile communication system as claimed in [any of claims] claim 26 [through 29], wherein:

a part or all of the information to be distributed to the mobile set is copied, and the information to be distributed to the mobile set is distributed to the thus-determined plurality of base stations with duplication of the part or all of the information.

32. (Amended) The method of distributing information in a mobile communication system as claimed in [any of claims] claim 26 [through 31], wherein:

a larger amount of the information is distributed to a base station of the thus-determined plurality of base stations which has a smaller amount of information in a transmission waiting state.

33. (Amended) The method of distributing information in a mobile communication system as claimed in [any of claims] claim 26 [through 31], wherein:

a larger amount of the information is distributed to a base station of the thus-determined plurality of base stations which has a better state of the radio channel with the mobile set.

34. (Amended) The method of distributing information in a mobile communication system as claimed in [any of claims] claim 26 [through 31], wherein

amounts of distributing of the information to the thus-determined plurality of base stations are determined based on an amount of information in a transmission waiting state and a state of the radio channel with the mobile set in each base station.

36. (Amended) The method of distributing information in a mobile communication system as claimed in [any of claims] claim 26 [through 35], wherein:

when a state of information piled up in a transmission waiting state in each base station becomes a predetermined state, a part or all of the information in a transmission waiting state is collected; and

the thus-collected information is re-distributed to one or a plurality of base stations as information to be distributed.

40. (Amended) The information distributing control device as claimed in claim 38 [or 39], wherein:

said base station determining means determines the one or plurality of base stations to perform communication with the mobile set based on performance required for transmission of the information to be distributed to the mobile set.

41. (Amended) The information distributing control device as claimed in [any of claims] claim 38 [through 40], wherein:

said base station determining means determines the one or plurality of base stations to perform communication with the mobile set based on a transmission waiting state of the information to be distributed in each base station.

42. (Amended) The information distributing control device as claimed in [any of claims] claim 38 [through 41], wherein:

said information distributing means distributes the information to be distributed to the mobile set to the thus-determined plurality of base stations without duplication.

43. (Amended) The information distributing control device as claimed in [any of claims] claim 38 [through 41], wherein:

said information distributing means copies a part or all of the information to be distributed to the mobile set, and distributes the information to be distributed to the mobile set

to the thus-determined plurality of base stations with duplication of the part or all of the information.

44. (Amended) The information distributing control device as claimed in [any of claims] claim 38 [through 43], wherein:

said information distributing means distributes a larger amount of the information to a base station of the thus-determined plurality of base stations which has a smaller amount of information in a transmission waiting state.

45. (Amended) The information distributing control device as claimed in [any of claims] claim 38 [through 43], wherein:

said information distributing means distributes a larger amount of the information to a base station of the thus-determined plurality of base stations which has a better state of the radio channel with the mobile set.

46. (Amended) The information distributing control device as claimed in [any of claims] claim 38 [through 43], wherein:

said information distributing means determines amounts of distributing of the information to the thus-determined plurality of base stations based on an amount of information in a transmission waiting state and a state of the radio channel with the mobile set in each base station.

48. (Amended) The information distributing control device as claimed in [any of claims] claim 38 [through 47], further comprising information collecting means which, when a state of information piled up in a transmission waiting state in each base station becomes a predetermined state, collects a part or all of the information in the transmission waiting state,

said information distributing means redistributing the thus-collected information to one or a plurality of base stations as information to be distributed.--